

# **International Conference - Environment at Crossroads: Smart Approaches for a Sustainable Future (ECOSMART 2015)**

Procedia Environmental Sciences Volume 32

Bucharest, Romania  
12 - 15 November 2015

## **Editors:**

**Ioan-Cristian Ioja  
Laura Comanescu  
Liliana Dumitrache**

**Alexandru Nedelea  
Mihai-Razvan Nita**

ISBN: 978-1-5108-3622-8

**Printed from e-media with permission by:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571



**Some format issues inherent in the e-media version may also appear in this print version.**

Copyright© by Elsevier B.V.  
All rights reserved.

Printed by Curran Associates, Inc. (2017)

For permission requests, please contact Elsevier B.V.  
at the address below.

Elsevier B.V.  
Radarweg 29  
Amsterdam 1043 NX  
The Netherlands

Phone: +31 20 485 3911  
Fax: +31 20 485 2457

<http://www.elsevierpublishingsolutions.com/contact.asp>

**Additional copies of this publication are available from:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: 845-758-0400  
Fax: 845-758-2633  
Email: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)



## Contents

### Editorial

C.I. Ioja, L. Comănescu, A. Nedelea, L. Dumitrache, M.R. Niță .....	1
---	---

### Section 1 - Protected areas management

Indicators for Environmental Conflict Monitoring in Natura 2000 Sites I.-C. Ioja, C.-A. Hossu, M.-R. Niță, D.-A. Onose, D.-L. Badiu, S. Manolache .....	4
The Assessment of Regulatory Ecosystem Services: The Case of the Sediment Retention Service in a Mountain Landscape in the Southern Romanian Carpathians S.-M. Bogdan, I. Pătru-Stupariu, L. Zaharia .....	12
Evaluating the Functional Connectivity of Natura 2000 Forest Patch for Mammals in Romania M.-I. Niculae, M.R. Nita, G.O. Vanau, M. Patroescu .....	28
Governance of Sustainable Tourism in a Vast Area Surrounding a National Park G. Benedetto, D. Carboni, G.L. Corinto .....	38
Non-invasive Monitoring of Organohalogen Compounds in Eggshells and Feathers of Birds from the Lower Prut Floodplain Natural Park in Romania M.L. Matache, C. Hura, I.G. David .....	49
Wetlands – As Significant Features of the Salt Karst Landscape in the Melecid Plateau, Vrancea Subcarpathians, Romania D. Strat .....	59
Assessing Public Perception on Protected Areas in Iron Gates Natural Park C.M. Ciocănea, C. Sorescu, M. Ianoși, V. Bagrinovschi .....	70

### Section 2 - Urban ecology

Arguments for Integrative Management of Protected Areas in the Cities – Case Study in Bucharest City G. Manea, E. Matei, I. Vijulie, L. Tîrlă, R. Cuculici, O. Cocoș, A. Tișcovschi .....	80
Microclimate Modification by Urban Shade Trees – An Integrated Approach to Aid Ecosystem Service Based Decision-making Á. Takács, M. Kiss, A. Hof, E. Tanács, Á. Gulyás, N. Kántor .....	97
Assessing the Fragmentation of the Green Infrastructure in Romanian Cities Using Fractal Models and Numerical Taxonomy A.-I. Petrișor, I.C. Andronache, L.E. Petrișor, A.-M. Ciobotaru, D. Peptenatu .....	110
Peri-urban Areas and Land Use Structure in Romania at LAU2 Level: An Exploratory Spatial Data Analysis C. Lincaru, D. Atanasiu, V. Ciucă, S. Pircioig .....	124
Census-based Social Vulnerability Assessment for Bucharest I. Armaș, A. Gavriș .....	138
Monitoring Pollution Level in Railroad Right-of-Way A.K. Strelkov, S.V. Stepanov, S.Yu. Teplykh, A.M. Sargsyan .....	147
Urban Landscape Quality Index – Planning Tool for Evaluating Urban Landscapes and Improving the Quality of Life A.A. Gavrilidis, C.M. Ciocănea, M.R. Niță, D.A. Onose, I.I. Năstase .....	155
A Brief Analysis of the Sustainable Mobility Approach in Bucharest B.A. Magdalena .....	168
Assessment of GSM HF-Radiation Impact Levels within the Residential Area of Craiova City I.E. Marinescu, C. Poparlan .....	177
Evolutionism. Logic, Language and Thought. On the “Miraculous” Order of the World A. Angheluș .....	184

### Section 3 - Land suitability assessment

Floods and Public Perception on their Effect. Case Study: Tecuci Plain (Romania), Year 2013 L. Comănescu, A. Nedelea .....	190
High Resolution Landscape Change Analysis with CORONA KH-4B Imagery. A Case Study from Iron Gates Reservoir Area B. Mihai, C. Nistor, L. Toma, I. Săvulescu .....	200
Using Natural Tracers to Track the Groundwater Flow in a Mining Area A.I. Cozma, C. Baciu, M. Moldovan, I.-C. Pop .....	211
Comparison of Multi-Temporal Differential Interferometry Techniques Applied to the Measurement of Bucharest City Subsidence M. Gheorghe, I. Armaș .....	221

Erosion and Use of the Coast in the Northern Sardinia (Italy) S. Ginesu, D. Carboni, M. Marin.....	230
Mapping Land Cover Using Remote Sensing Data and GIS Techniques: A Case Study of Prahova Subcarpathians M.-R. Rujoiu-Mare, B.-A. Mihai.....	244
Man-made Changes of the Relief Due to the Mining Activities within Husnicioara Open Pit (Mehedinți County, Romania) S. Boengiu, O. Ionuș, E. Marinescu.....	256
A New Approach to the Land Capability Classification: Case Study of Turkey I. Atalay .....	264
A Hydrometric and Hydrological Approach Test at Microscale G. Minea, M.-J. Adler, G. Pătru.....	275
Study on the Evaporation and Evapotranspiration Measured on the Căldăruşani Lake (Romania) F.-I. Stan, G. Neculau, L. Zaharia, G. Ioana-Toroimac, S. Mihalache.....	281
<b>Section 4 - Workshop Geography of health spatial disparities and inequities in health and medical assistance</b>	
Contrasting Clustering in Health Care Provision in Romania: Spatial and Aspatial Limitations L. Dumitache, M. Nae, D. Dumbrăveanu, G. Simion, B. Suditu.....	290
The Relationship between Health Care Needs and Accessibility to Health Care Services in Botosani County- Romania T.E. Ursulica .....	300
Influence of Population Lifestyle on Local Health Profile. Case Study: Ialomița County A.-M. Taloș .....	311
Geographical Distribution of Avoidable Hospital Conditions in Romania M. Ciutan, S.G. Scîntea, M. Dosius, C. Motolea, C. Vlădescu .....	318
Potentially Life-threatening Vascular Events (Myocardial and Cerebral Infarction) - Geographical Distribution and Temporal Evolution in Romania C. Sasu, M. Ciutan, S.-G. Scîntea, S. Mușat, R. Diaconescu .....	327
<b>Section 5 - Social and economical sustainability</b>	
An Exploratory Analysis of the Profitability of Small and Medium Firms Using Panel Data: The Case of the Greater Bucharest Metropolitan Area C. Vâlsan, E. Druică, R.-D. Pintilii .....	337
Using Fractal Analysis in Modeling Trends in the National Economy I.C. Andronache, D. Peptenatu, A.-M. Ciobotaru, A.K. Gruia, N.M. Gropoșilă .....	344
Semi-subsistence Farming Development in a Carpathian Declining Mining Area. A Microscale Study of Landowners' Perception: Stulpicani Commune, Romania E. Matei, D. Vasilcu, G. Manea, O. Cocoș, R. Cuculici, I. Vijulie, D. Matei .....	352
Tourism, Basic Functionality versus Complementary Component of the Territorial Systems in Romania R.-D. Pintilii, D. Peptenatu, A. Grecu, A.-M. Ilie, A.-G. Simion .....	364
Revival of the Rice Crops in the South of Romania: Pros and Cons I. Vijulie, G. Manea, L. Tîrlă, E. Matei, M. Preda, R. Cuculici .....	373
Health Tourism Contribution to the Structural Dynamics of the Territorial Systems with Tourism Functionality C.C. Drăghici, D. Diaconu, C. Teodorescu, R.-D. Pintilii, A.-M. Ciobotaru .....	386
Correlations between Traffic Noise and Accommodation Units Location in Craiova (Romania) C. Vilcea, M. Licurici, O. Ionuș.....	394
A Model of Development Strategy Encompassing Creative Industries to Reduce Visual Pollution–Case Study: Strada Franceză, Bucharest's Old City A.-L. Cercleux, F.-C. Merciu, G.-L. Merciu .....	404
Vernacular and Technology. InBetween M. Hărmănescu, C. Enache .....	412
The Assessment of Social and Economic Impacts Associated to an Abandoned Mining Site. Case Study: Ciudanovita (Romania) M. George-Laurentiu, M. Florentina-Cristina, C. Andreea-Loreta .....	420